

REMARKS/ARGUMENTS

Applicants hereby request further examination and reconsideration of the application in view of the discussion below. Claims 1, 6, 7, 11-14, and 21 are presently pending. Applicants have added claims 22-32.

The Examiner has rejected claims 1,6,7,11-14 and 21 under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The Examiner contends that the scope of the claims is unclear as set forth. The Examiner states that the preamble sets forth a fastening device for two members, yet the body of the claims positively recites structure of the two members as part of the claimed invention. The Examiner recommends that the claims be amended to reflect the claimed combination of the lid and container in addition to the threads. The Examiner further states that the phrases "each of said first and second component members includes an even number of threads" in claim 6 is redundant since the limitation has been previously set forth in claim 1. The Examiner also states that claim 6 recites the limitation "said threads having a different lead angle" in line 3. The Examiner concludes that there is insufficient antecedent basis of this limitation in the claim as "at least one thread" was set forth in claim 1.

Applicants have amended claim 1 and 6 and added new claim 22 to remove the objectionable language and to provide further clarity to the claims. Applicants submit that the claims are now in allowable form and rejection on the basis of indefiniteness should be withdrawn.

Claims 1, 6, 7, 11-14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grabenkort (U.S. 4,784,658). The Examiner submits that Grabenkort teaches a closure having external threads and a container having mating internal threads. At least one thread of the closure has a different lead angle from the threads of the container. The Examiner concludes that it would have been obvious to one having ordinary skill in the art at the time the invention was made to reverse the threads of the closure and container to internal and external threads, respectively, since it has been held that a mere reversal of the essential working parts of a device involves only a routine skill in the art.

Applicants respectfully disagree with the Examiner's rejection. Grabenkort discloses a container having a port and a vial. Grabenkort teaches that in order to induce a drawing action between the port plug and the stopper, all of the lead of the threads of the plug should be greater than all of the lead of the threads of the vial [col. 4, line 25]. Moreover, Grabenkort teaches that the lead of the threads for all elements of the invention are uniform. Grabenkort does not teach that lead angles of threads of the same element such as the plug or the vial should differ. Applicants have amended claim 1 of the present invention to provide for at least one but not all of the lead angles of the second component member to be different from those of the first component member. This results in an elastic deformation of the threads and a friction engagement of the threads as a result of the differing angle of at least one thread of the second

component relative to the first component. Grabenkort does not teach the claimed invention in that it does not teach or suggest altering less than all of the lead angle of the plug threads so as to cause a frictional engagement of the stopper and plug. Rather, Grabenkort teaches a uniform thread differential between the thread pairs. There is no teaching or suggestion to modify the thread pairs that would result in the present invention as claimed. Accordingly, rejection of amended claim 1 on the basis of Grabenkort is erroneous and should be withdrawn. The remaining claims depend on claim 1. For the reasons set forth above in relation to claim 1, claims 6, 7 11-14 and 21 should also be allowed and withdrawal of the pending rejection is solicited.

Regarding claims 11-14, the Examiner states that it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the lead angle of any given difference, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. Modifying the device of Grabenkort would work equally as well as that claimed.

Applicants respectfully disagree with the Examiner's statements. Grabenkort does not teach the present invention in that Grabenkort does not teach the use of altering less than all threads to achieve frictional engagement of the threads as a result of the differing leads of the threads within the same element. Accordingly, claims 11-14 are not rendered obvious under Grabenkort and should be allowed in present form.

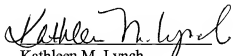
Applicants have added new claims as well in response to the examiner's telephone conference dated January 30, 2007. Applicants have amended the claims to include independent claim 23 which is directed to a method of fastening a device having first and second components where at least one but not all of the threads of the first component member have a different lead angle from the lead angle of the threads of said second component member. In claim 24, applicants have added an independent device claim directed to a fastening device having first and second components where at least one but not all of the threads of the second component member have a different lead angle from the lead angle of the threads of the first component member. In both claims, the first and second components of the fastening device have threads having lead angles. In claim 23, the first component member and second component member have lead angles on the threads. In claim 23 the first component has at least one but not all of the threads has a different lead angle from the lead angle of the threads of the second component member. Applicants submit that this is not disclosed or taught by the cited prior art and should be allowed in its present form.

Similarly, in independent claim 24, Applicants have added a device claim directed to a fastening device having a first component and a second component. The first and second components have threads having lead angles. Claim 24 provides that at least one but not all of the threads of the second component have a different lead angle from the lead angle of the threads of the first component. As state above, Applicants believe this structure differs from the cited prior art and is entitled to patent protection in its present form.

The Commissioner is hereby authorized to charge payment of any additional filing or application fees associated with this communication or credit any overpayment to Deposit Account No. 13-4365.

Respectfully submitted,

Dated: 2.15.07


Kathleen M. Lynch
Attorney for Applicants
Registration No. 33,957
Moore & Van Allen PLLC
P.O. Box 13706
Research Triangle Park, NC 27709
Telephone: (919) 286-8000
Facsimile: (919) 286-8199